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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/868,117	08/20/2001	Robert Schmeler	6077-04WOUS	5845
7590 McCormick Paulding & Huber City Place II 185 Asylum Street Hartford, CT 06103-4102			EXAMINER WALBERG, TERESA J	
			ART UNIT 3744	PAPER NUMBER
			MAIL DATE 11/25/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/868,117

Applicant(s)

SCHMELE ET AL.

Examiner

Teresa J. Walberg

Art Unit

3744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 August 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 31-62 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 35-46 and 51-62 is/are allowed.
- 6) ☒ Claim(s) 31-34 and 47-50 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/C)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 35-46 and 51-62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fischer et al (4,382,585) in view of Stumbough (2,911,235).

Fischer et al disclose a cooling plate (Figs. 1 and 2) for an iron and steel making furnace and method of manufacturing including a copper cooling plate body (1) with at least one cooling duct (3) for a cooling medium, which extends essentially parallel with the back of the cooling plate body (Figs. 1 and 2), at least one preformed externally accessible recess into which the cooling duct opens (at 4), at least one connection piece (5) for a cooling medium connection on the back of the cooling plate body (Fig. 2), a formed piece (4) that is fitted in the preformed externally accessible recess in the cooling plate body so as to form a deflection surface (the formed piece (4) is considered to deflect the fluid, since it causes it to turn) for the cooling medium flowing from the connection piece (5) into the cooling duct (3) or from the cooling duct into the connection piece (Fig. 2), the formed piece being arranged in an axial extension of the cooling duct (Fig. 2), the deflection surface being formed by one of its end faces (Fig. 2), the cooling plate body having a front side, a rear side and an end face (Figs. 1 and 2), the recess axially extends the cooling duct into the end face (Fig. 2), the

connection piece (5) opens from the rear side into the cooling duct (Fig. 2), the formed piece (4) is a plug which is inserted from the end face into the recess and extends to the area where the connection piece opens into the cooling duct to form the deflection surface for the cooling medium in this area (Fig. 2), the at least one cooling duct is a blind bore drilled into the cooling plate body (col. 3, line 6).

Fischer et al does not disclose the plug being long enough to form an axial extension of the connection piece or having a beveled end which forms the deflection surface. Stumbough discloses a fitting including plug (22) having a beveled surface (28) which forms a defection surface in a pipe connection (Fig. 1) and extending inward far enough to form an axial extension of the connection pieces (14 and 16). It would have been obvious in view of Stumbough to use a beveled surface for the plug in the cooling plate of Fischer et al and to make the plug long enough to form an axial extension of the connection piece, the motivation being to provide smoother flow of the fluid in the pipes and easier cleaning of the device.

3. Applicant's arguments filed 13 August 2008 have been fully considered but they are not persuasive. .

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., reducing pressure losses, avoiding steam bubble formation, and

avoiding air pockets resulting in hot spots) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

The applicant argues that Stumbough relates to a clean-out fitting and is non-analogous art since the present device does not use cast-in pipes and does not contain pipes to be connected by fittings. It is noted that present invention and the base reference to Fischer both appear to disclose that drilled or molded fluid flow tubes are connected to fittings in the same manner that cast-in pipes are. Since the same types of fittings are used in the same way in order make fluid connections and to seal openings, reference directed to the structure of such fittings are considered to be analogous.

The applicant argues that Stumbough teaches different purposes, such as deflecting a clean out tool or preventing the portion of the passage that is occupied by the insert from becoming clogged by waste and sediment, and would therefore not be considered for the purposes of reducing pressure losses, avoiding steam bubble formation or avoiding air pockets. However, in any fluid flow system, including the present one, there would be an interest in preventing sediment build up. It is also noted that an insert that keeps out sediment would also inherently be capable of keeping out bubbles and air pockets.

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Teresa J. Walberg whose telephone number is 571-272-4790. The examiner can normally be reached on M-F 8:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached on 571-272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Teresa J. Walberg/
Primary Examiner, Art Unit 3744

/TW/